Serial Number: _09/359,300_

ENTERED

CRF Processing Date: _10/11/2000_
Edited by:
Verified by: _Av_ (STIC staff)

RECEIVED
OCT 23 2000
TECH CENTER 1600/2900

#12

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically:
_____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:
_____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:
_____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included:
_____

☐ Deleted extra, invalid, headings used by an applicant, specifically:
_____

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as_____

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically:
_____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically:
_____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☑ Other: _Corrected CDS designation - Seqs 9 and 50_
_____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

1636

```
 4 <110> APPLICANT: KUMAGAI. Monto H.
 5         DELLA-CIOPPA, Guy R.
 6         ERWIN, Robert L.
 7         McGEE, David R.
 9 <120> TITLE OF INVENTION: METHOD OF DETERMINING THE PRESENCE OF A
10         TRAIT IN A PLANT BY TRANSFECTING A NUCLEIC ACID SEQUENCE OF
11         A NON-PLANT DONOR INTO A HOST PLANT IN A POSITIVE
12         ORIENTATION
14 <130> FILE REFERENCE: 008010137US07
16 <140> CURRENT APPLICATION NUMBER: 09/359,300
17 <141> CURRENT FILING DATE: 1999-07-21
19 <160> NUMBER OF SEQ ID NOS: 60
21 <170> SOFTWARE: FastSEQ for Windows Version 3.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 26
25 <212> TYPE: DNA
26 <213> ORGANISM: Tomato mosaic virus
28 <400> SEQUENCE: 1
29  ctcgcaaagt ttcgaaccaa atcctc                              26
31 <210> SEQ ID NO: 2
32 <211> LENGTH: 35
33 <212> TYPE: DNA
34 <213> ORGANISM: Tomato mosaic virus
36 <400> SEQUENCE: 2
37  cggggtacct gggccccaac cggggggttcc ggggg                    35
39 <210> SEQ ID NO: 3
40 <211> LENGTH: 41
41 <212> TYPE: DNA
42 <213> ORGANISM: Tomato mosaic virus
44 <400> SEQUENCE: 3
45  tcctcgagcc taggctcgca aagtttcgaa ccaaatcctc a              41
47 <210> SEQ ID NO: 4
48 <211> LENGTH: 35
49 <212> TYPE: DNA
50 <213> ORGANISM: Tomato mosaic virus
52 <400> SEQUENCE: 4
53  cggggtacct gggccccaac cggggggttcc ggggg                    35
55 <210> SEQ ID NO: 5
56 <211> LENGTH: 24
57 <212> TYPE: DNA
58 <213> ORGANISM: Tomato mosaic virus
60 <400> SEQUENCE: 5
61  tatgtatggt gcagaagaac agat                                24
63 <210> SEQ ID NO: 6
64 <211> LENGTH: 24
65 <212> TYPE: DNA
66 <213> ORGANISM: Tomato mosaic virus
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RAW SEQUENCE LISTING   DATE: 10/11/2000
PATENT APPLICATION: US/09/359,300   TIME: 12:10:45

Input Set : A:\008010137US07.TXT
Output Set: N:\CRF3\10112000\I359300.raw

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69  agtcgactct tcctcttctg gcat                                              24
71 <210> SEQ ID NO: 7
72 <211> LENGTH: 30
73 <212> TYPE: DNA
74 <213> ORGANISM: Tomato mosaic virus
76 <400> SEQUENCE: 7                                                        30
77  tgctcgagtg tgttcttcag ttttctgtca
79 <210> SEQ ID NO: 8
80 <211> LENGTH: 30
81 <212> TYPE: DNA
82 <213> ORGANISM: Tomato mosaic virus
84 <400> SEQUENCE: 8                                                        30
85  aactcgagcg ctttgatttc tccgaagctt
87 <210> SEQ ID NO: 9
88 <211> LENGTH: 114
89 <212> TYPE: DNA
90 <213> ORGANISM: Tomato mosaic virus
92 <220> FEATURE:
93 <221> NAME/KEY: CDS                         4
W--> 94 <222> LOCATION: (28)...(114)
96 <400> SEQUENCE: 9
97  gttttaaata cgctcgaggt tttaaat atg tct gtt gcc ttg tta tgg gtt gtt      54
98                                  Met Ser Val Ala Leu Leu Trp Val Val
99                                   1               5
101  tct cct tgt gac gtc tca aat ggg aca agt ttc atg gaa tca gtc cgg       102
102  Ser Pro Cys Asp Val Ser Asn Gly Thr Ser Phe Met Glu Ser Val Arg
103   10              15              20              25
105  gag gga aac cgt                                                        114
106  Glu Gly Asn Arg
110 <210> SEQ ID NO: 10
111 <211> LENGTH: 29
112 <212> TYPE: PRT
113 <213> ORGANISM: Tomato mosaic virus
115 <400> SEQUENCE: 10
116  Met Ser Val Ala Leu Leu Trp Val Val Ser Pro Cys Asp Val Ser Asn
117   1               5                  10              15
118  Gly Thr Ser Phe Met Glu Ser Val Arg Glu Gly Asn Arg
119               20                  25
121 <210> SEQ ID NO: 11
122 <211> LENGTH: 39
123 <212> TYPE: DNA
124 <213> ORGANISM: Nicotiana benthamiana
126 <400> SEQUENCE: 11                                                      39
127  gcctcgagtg cagcatggaa acccttctaa agcttttcc
129 <210> SEQ ID NO: 12
130 <211> LENGTH: 36
131 <212> TYPE: DNA
132 <213> ORGANISM: Nicotiana benthamiana
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134 <400> SEQUENCE: 12
135  tccctaggtc aaaggctctc tattgctaga ttgccc                        36
137 <210> SEQ ID NO: 13
138 <211> LENGTH: 111
139 <212> TYPE: DNA
140 <213> ORGANISM: Tobacco mosaic virus
142 <220> FEATURE:
143 <221> NAME/KEY: CDS
144 <222> LOCATION: (25)...(111)
146 <400> SEQUENCE: 13
147  gttttaaata cgctcgagtg cagc atg gaa acc ctt cta aag cct ttt cca   51
148                            Met Glu Thr Leu Leu Lys Pro Phe Pro
149                             1               5
151  tct cct tta ctt tcc att cct act cct aac atg tat agt ttc aaa cac  99
152  Ser Pro Leu Leu Ser Ile Pro Thr Pro Asn Met Tyr Ser Phe Lys His
153   10               15                  20                  25
155  aac ttc act ttt                                                 111
156  Asn Phe Thr Phe
160 <210> SEQ ID NO: 14
161 <211> LENGTH: 29
162 <212> TYPE: PRT
163 <213> ORGANISM: Tobacco mosaic virus
165 <400> SEQUENCE: 14
166  Met Glu Thr Leu Leu Lys Pro Phe Pro Ser Pro Leu Leu Ser Ile Pro
167   1               5                  10                  15
168  Thr Pro Asn Met Tyr Ser Phe Lys His Asn Phe Thr Phe
169   20                  25
171 <210> SEQ ID NO: 15
172 <211> LENGTH: 44
173 <212> TYPE: DNA
174 <213> ORGANISM: Erwinia herbicola
176 <400> SEQUENCE: 15
177  ccaagcttct cgagtgcagc atgcagcaac cgccgctgct tgac                44
179 <210> SEQ ID NO: 16
180 <211> LENGTH: 43
181 <212> TYPE: DNA
182 <213> ORGANISM: Erwinia herbicola
184 <400> SEQUENCE: 16
185  aagatctctc gagctaaacg ggacgctgcc aaagaccggc cgc                 43
187 <210> SEQ ID NO: 17
188 <211> LENGTH: 23
189 <212> TYPE: DNA
190 <213> ORGANISM: Tobacco mild green mosaic virus
192 <400> SEQUENCE: 17
193  tgtgaaactc gaaaaggttc cgg                                       23
195 <210> SEQ ID NO: 18
196 <211> LENGTH: 36
197 <212> TYPE: DNA
198 <213> ORGANISM: Tobacco mild green mosaic virus
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200 <400> SEQUENCE: 18                                                            36
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203 <210> SEQ ID NO: 19
204 <211> LENGTH: 31
205 <212> TYPE: DNA
206 <213> ORGANISM: Ribgrass mosaic virus
208 <400> SEQUENCE: 19                                                            31
209  tactcgaggt tcataagacc gcggtaggcg g
211 <210> SEQ ID NO: 20
212 <211> LENGTH: 36
213 <212> TYPE: DNA
214 <213> ORGANISM: Ribgrass mosaic virus
216 <400> SEQUENCE: 20                                                            36
217  cgggtacct gggcccctac ccggggttta gggagg
219 <210> SEQ ID NO: 21
220 <211> LENGTH: 107
221 <212> TYPE: DNA
222 <213> ORGANISM: N. tabacum
224 <220> FEATURE:
225 <221> NAME/KEY: CDS
226 <222> LOCATION: (21)...(107)
228 <400> SEQUENCE: 21
229  gtttaaata cgctcgagcc atg gct tcc tca gtt ctt tcc tct gca gca gtt    53
230                         Met Ala Ser Ser Val Leu Ser Ser Ala Ala Val
231                          1               5                       10
233  gcc acc cgc agc aat gtt gct caa gct aac atg gtt gca cct ttc act    101
234  Ala Thr Arg Ser Asn Val Ala Gln Ala Asn Met Val Ala Pro Phe Thr
235                  15                  20                  25
237  ggc ctt                                                             107
238  Gly Leu
242 <210> SEQ ID NO: 22
243 <211> LENGTH: 29
244 <212> TYPE: PRT
245 <213> ORGANISM: N. tabacum
247 <400> SEQUENCE: 22
248  Met Ala Ser Ser Val Leu Ser Ser Ala Ala Val Ala Thr Arg Ser Asn
249   1               5                  10                  15
250  Val Ala Gln Ala Asn Met Val Ala Pro Phe Thr Gly Leu
251                  20                  25
253 <210> SEQ ID NO: 23
254 <211> LENGTH: 1543
255 <212> TYPE: DNA
256 <213> ORGANISM: Tobacco mild green mosaic virus
258 <400> SEQUENCE: 23
259  ctcgaggttc ataagaccgc ggtaggcgga gcgtttgttt actgtagtat aattaaatat    60
260  ttgtcgata aaaggttgtt taaagatttg tttttgttt gactgagtcg ataatgtctt     120
261  acgagcctaa agttagtgac ttccttgctc ttacgaaaaa ggaggaaatt ttacccaagg    180
262  ctttgacgag attaaagact gtctctatta gtactaagga tgttatatct gttaaggagt    240
263  ctgagtccct gtgtgatatt gatttgttag tgaatgtgcc attagataag tataggtatg    300
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264  tgggtgtttt gggtgttgtt ttcaccggtg aatggctggt accggatttc gttaaaggtg   360
265  gggtaacagt gagcgtgatt gacaaacggc ttgaaaattc cagagagtgc ataattggta   420
266  cgtaccgagc tgctgtaaag gacagaaggt tccagttcaa gctggttcca aattacttcg   480
267  tatccattgc ggatgccaag cgaaaaccgt ggcaggttca tgtgcgaatt caaaatctga   540
268  agatcgaagc tggatggcaa cctctagctc tagaggtggt ttctgttgcc atggttacta   600
269  ataacgtggt tgttaaaggt ttgagggaaa aggtcatcgc agtgaatgat ccgaacgtcg   660
270  aaggtttcga aggtgtggtt gacgatttcg tcgattcggt tgctgcattc aaggcgattg   720
271  acagtttccg aaagaaaaag aaaaagattg gaggaaggga tgtaaataat aataagtata   780
272  gatatagacc ggagagatac gccggtcctg attcgttaca atataaagaa gaaaatggtt   840
273  tacaacatca cgagctcgaa tcagtaccag tatttcgcag cgatgtgggc agagcccaca   900
274  gcgatgctta accagtgcgt gtctgcgttg tcgcaatcgt atcaaactca ggcggcaaga   960
275  gatactgtta gacagcagtt ctctaacctt ctgagtgcga ttgtgacacc gaaccagcgg   1020
276  tttccagaaa caggataccg ggtgtatatt aattcagcag ttctaaaacc gttgtacgag   1080
277  tctctcatga agtcctttga tactagaaat aggatcattg aaactgaaga agagtcgcgt   1140
278  ccatcggctt ccgaagtatc taatgcaaca caacgtgttg atgatgcgac cgtggccatc   1200
279  aggagtcaaa ttcagctttt gctgaacgag ctctccaacg gacatggtct gatgaacagg   1260
280  gcagagttcg aggtttttatt accttgggct actgcgccag ctacataggc gtggtgcaca   1320
281  cgatagtgca tagtgttttt ctctccactt aaatcgaaga gatatactta cggtgtaatt   1380
282  ccgcaagggt ggcgtaaacc aaattacgca atgtttttagg ttccatttaa atcgaaacct   1440
283  gttatttcct ggatcacctg ttaacgtacg cgtggcgtat attacagtgg gaataactaa   1500
284  aagtgagagg ttcgaatcct ccctaacccc gggtaggggc cca                     1543
286  <210> SEQ ID NO: 24
287  <211> LENGTH: 55
288  <212> TYPE: DNA
289  <213> ORGANISM: rape mosaic virus
291  <400> SEQUENCE: 24                                                    55
292   gatggcgcct taatacgact cactatagtt ttattttgt tgcaacaaca acaac
294  <210> SEQ ID NO: 25
295  <211> LENGTH: 30
296  <212> TYPE: DNA
297  <213> ORGANISM: rape mosaic virus
299  <400> SEQUENCE: 25                                                    30
300   cttgtgccct tcatgacgag ctatatcacg
302  <210> SEQ ID NO: 26
303  <211> LENGTH: 497
304  <212> TYPE: DNA
305  <213> ORGANISM: rape mosaic virus
307  <400> SEQUENCE: 26
308   ccttaatacg actcactata gtttttatttt tgttgcaaca acaacaacaa attacaataa   60
309   caacaaaaca aatacaaaca acaacaacat ggcacaattt caacaaacag taaacatgca   120
310   aacattgcag gctgccgcag ggcgcaacag cctggtgaat gatttagcct cacgacgtgt   180
311   ttatgacaat gctgtcgagg agctaaatgc acgtcgagag cgccctaagg ttcattactc   240
312   caaatcagtg tctacggaac atgacgctgt tagcttcaaa cgcttatccg gagtttgaga   300
313   tttcctttac tcatacccaa catgccgtac actcccttgc gggtggccta aggactcttg   360
314   agttagagta tctcatgatg caagttccgt tcggttctct gacgtacgac atcggtggta   420
315   actttgcagc gcacctttttc aaaggacgcg actacgttca ctgctgtatg ccaaacttgg   480
316   atgtacgtga tatagct                                                    497
318  <210> SEQ ID NO: 27
319  <211> LENGTH: 55
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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/359,300

DATE: 10/11/2000
TIME: 12:10:46

Input Set : A:\008010137US07.TXT
Output Set: N:\CRF3\10112000\I359300.raw

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L:733 M:361 W: Invalid Split Codon, Sequence data for SEQ ID#: 50